Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

In the Claims

- 1-48. (Cancelled)
- 49. (Currently amended) An embolectomy device for use in a blood vessel having a diameter, comprising:
- a catheter having a proximal end, a distal end and a lumen extending therebetween, the lumen having a longitudinal axis extending from the proximal end to the distal end:
- a vacuum source fluidly attached to the proximal end of the catheter to provide a source of vacuum to the catheter lumen;
- a wire having a proximal end and a distal end and a center line extending therebetween that follows the path of the wire, the wire further having a proximal region, an intermediate region and a distal region, and the wire being at least partially disposed in the lumen.

wherein the intermediate region has a generally uniform width along its length,
wherein the distal region of the wire includes a distal tip having a generally
uniform profile along the center line and a region proximate the distal tip having a
maximum width perpendicular to the longitudinal axis of the lumen that is greater than
the width of the intermediate region of the wire and wherein the distal tip has a width that

is less than that of the proximate region proximate the distal tip and wherein the intermediate region width is also less than that of the proximate region.

- 50. (Previously presented) The embolectomy device of claim 49 wherein the distal region has a maximum width that is less than half the diameter of the blood vessel.
- 51. (Currently amended) The embolectomy device of claim 50 wherein the proximate region of the distal region has a curved profile with respect to parallel to the longitudinal axis.
- 52. (Previously presented) The embolectomy device of claim 51 wherein the maximum width of the proximate region is at least twice the width of the distal tip.
- 53. (Previously presented) The embolectomy device of claim 52 wherein the cross-sectional shape of the wire along the center line is a simple closed shape.
 - 54. (Cancelled)

- 55. (Previously presented) The embolectomy device of claim 49 wherein the wire is configured to move rapidly along the longitudinal axis of the lumen proximally and distally.
- 56. (Previously presented) The embolectomy device of claim 53 wherein the proximate region has a first section having a first end that has a maximum thickness of material perpendicular to the longitudinal axis and a second end that abuts the distal tip, the proximate region further having a second section having a first end that abuts the first end of the first section and a second end that has a width equal to that of the intermediate region of the wire,

wherein the first section is longer than the second section.

- 57. (Previously presented) The embolectomy device of claim 56 wherein the first section transitions gradually from the first end of the first section to the second end of the first section.
- 58. (Previously presented) The embolectomy device of claim 56 wherein the first section is at least twice as long as the second section.
- 59. (Previously presented) The embolectomy device of claim 56 wherein the magnitude of the tangent of any angle between a first line tangent to a point on the center line in the first section and a second line, coplanar to the first line, that is tangent to a second point on the surface of the wire is less than 0.84, where the second

point is defined by the intersection of the surface of the wire and a line that extends through the point on the center line and is perpendicular to the first line.

- 60. (Previously presented) The embolectomy device of claim 59 wherein the magnitude of the tangent is less than 0.71.
- 61. (Previously presented) The embolectomy device of claim 59 wherein the magnitude of the tangent is less than 0.58.
- 62. (Previously presented) The embolectomy device of claim 59 wherein the magnitude of the tangent is less than 0.47.
- $63. \quad \text{(Previously presented)} \qquad \text{The embolectomy device of claim 59}$ wherein the magnitude of the tangent is less than 0.37.
- 64. (Previously presented) The embolectomy device of claim 49 wherein the distal tip and the intermediate regions have approximately the same widths.
- 65. (Previously presented) The embolectomy device of claim 65 wherein the distal tip width is equal to that of the intermediate region.